UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

MOLDEX-METRIC, INC., Plaintiff, vs. 3M COMPANY and 3M INNOVATIVE PROPERTIES COMPANY, Defendants.	Civil No. 14-1821 (JNE/FLN) **DECLARATION OF SIGFRID D. SOLI IN SUPPORT OF MOLDEX'S MOTION FOR PARTIAL SUMMARY JUDGMENT ON ELEMENTS OF ITS SHAM LITIGATION AND MALICIOUS PROSECUTION CLAIMS**

I, Sigfrid D. Soli, hereby declare and state as follows:

1. I have personal knowledge of the facts set forth in this declaration, and could testify competently as to the matters set forth herein. I make this declaration in support of Moldex's Motion for Partial Summary Judgment on Elements of Its Sham Litigation and Malicious Prosecution Claims.

2. I was retained by the law firm of Quinn Emanuel Urquhart & Sullivan LLP ("Quinn Emanuel" or "Counsel"), counsel to Moldex-Metric, Inc. ("Moldex"), as an expert in the United States District Court for the District of Minnesota Civil Action No. 14-cv-01821-JNE/FLN.

3. I understand that Moldex is asking the Court to rule that 3M's assertion in the case *3M Co. v. Moldex-Metric, Inc.*, Case No. 12-cv-611-JNE-FLN (D. Minn) ("the Patent Litigation") of U.S. Patent No. 6,070,693 ("the '693 patent"), directed to certain double-ended earplugs, against Moldex's single-ended BattlePlug earplug was objectively baseless. I understand that the resolution of Moldex's motion depends in

whole or in part on the construction of the '693 patent claims, which must be decided as a matter of law.

4. In the event that the Court considers extrinsic evidence in connection with claim construction, I have been asked to provide this declaration with my expert opinion as to how a reasonable person of skill in the art would construe the claims of U.S. Patent No. 6,070,693 ("the '693 patent"). I also have been asked to provide my expert opinion, based on this claim construction of the '693 patent, whether Moldex's BattlePlug infringes the '693 patent. I also have been asked to provide my expert opinion, based on the constructions 3M would have had to advance during the Patent Litigation to establish infringement by the accused BattlePlug, whether the '693 patent is invalid.

SUMMARY OF QUALIFICATIONS

5. I currently hold the position of Senior Clinical Research Scientist at the House Clinic in Los Angeles, California, an institution that specializes in treating hearing disorders. I am also a Professor of Audiology at the University of British Columbia in Vancouver, British Columbia (Adjunct); a Clinical Professor of Otolaryngology[1] at the University of Southern California, in Los Angeles, California (Adjunct); and a Guest Professor of Otolaryngology at West China Hospital of Sichuan University in Chengdu, China. I am also a Fellow at the Acoustical Society of America.

6. In addition to these positions, I am currently a Senior Scientific Advisor for Widex A/S, one of the world's largest hearing aid manufacturers. I am also an expert consultant

[1] Otolaryngology is the study within the medical field of diseases and disorders of the ear, nose, throat (ENT), and related structures of the head and neck.

on functional hearing requirements and assessment for the United States Federal Occupational Safety & Health Administration; a Senior Consultant for the China Rehabilitation Research Center for Deaf Children; and a Senior Academic Consultant for the Chinese Academy of Audiological Rehabilitation. In these various roles, I have collaborated with researchers in the United States, Canada, and China to develop objective methods for assessing patients' functional hearing abilities.

7. I received my Bachelor of Arts in Physics and Mathematics from St. Olaf College in 1968. I received my Bachelor of Arts from the University of Minnesota in Psychology in 1974. I received my Ph.D. in Experimental Psychology from the University of Minnesota's Center for Research in Human Learning in 1978.

8. From 1984 to 1989, I served as Senior Speech Scientist in the Communications Group of the Hearing Research Laboratory at 3M Company. In this capacity, I worked on developing and evaluating cochlear implant and hearing aid technologies.

9. Between 1989 and 2013, I held various positions at the House Ear Institute in Los Angeles, California, where I focused on the design and development of hearing diagnostics, auditory assessment procedures—such as the Hearing In Noise Test ("HINT" Test)—and hearing devices. My titles included Vice President for Technology Transfer (1995-2012), Head of the Department of Human Communication Sciences and Devices (1989-2013), and Acting Director of Research (1994-1995). I also served as a Distinguished Scientist Emeritus at the House Research Institute from 2011 to 2014.

10. I have previously held a variety of investigative, consulting, advisory, and academic positions in fields related to audiology and otolaryngology. I was an

investigator for the University of Minnesota's Mechanisms of Auditory Processing Program Project (1988-1991). I consulted on speech processors for auditory prostheses at the Research Triangle Institute (1988-1993, 1997), on auditory prosthesis research and development at the Advanced Bionics Corporation (1993-1996), for the United States National Institute on Deafness and Other Communication Disorder (1993-1998), and for the National Research Council's Committee on Disability Determination for Individuals with Hearing Impairments (2003). I was also retained as a Hearing Specialist by the Corrections Standard Authority to develop hearing standards for California Correctional Officers (2008-2011); the DHA Group, Inc. to develop hearing standards for Federal Bureau of Investigation Agents (2010-2014); and the Ontario ministry of Community Safety and Correctional Services (2012-2014). In addition, I was a Member of the United States Food and Drug Administration ENT Device Panel (2001-2005). I was also a Visiting Professor of Otolaryngology at the Chinese University of Hong Kong (2008) and the Guest Editor of the International Journal of Audiology (2008).

11. I have also served as Chair of various conferences related to audiology and otolaryngology. These conferences include the Arrowhead Conference on Advanced Topics in Hearing Aid Research (1990, 1992, 1994, 1996, 2000, 2002, and 2004); the Management Committee for the House Ear Institute—Archer Communications HEAR Joint Venture (1991-1999); the Digital Signal Processing for Hearing Aids session between the Acoustical Society of the America and the Acoustical Society of Japan (1996); and the International Hearing Aid Research Conference (IHCON) (2006, 2008, and 2010). I also served as the General Chair of the Newport Beach meeting of the

Acoustical Society of America (2000), and am currently the Founding Chair of the Lake Arrowhead and Lake Tahoe Hearing Aid Research Conference.

12. I also have experience with the U.S. Patent system generally, and patented auditory technologies in particular. I am a named co-inventor on eight U.S. Patents and a total of 30 international patents. These patents include: "Pressure-regulating ear plug" (U.S. Patent No. 5,819,745); "Signal processor for and an auditory prosthesis utilizing channel dominance" (U.S. Patent No. 4,813,417); "Method of signal processing for maintaining directional hearing with hearing aids" (U.S. Patent No. 5,325,436); "Auditory prosthesis, noise suppression apparatus, and feedback suppression apparatus having focused adaptive filtering" (U.S. Patent No. 5,402,496); "Auditory prosthesis for adaptively filtering selected auditory component by user activation and method for doing same" (U.S. Patent No. 6,563,031 B1); and "Frequency shifter for use in adaptive feedback cancellers for hearing aids" (U.S. Patent No. 7,609,841).

13. My current curriculum vitae is attached to this declaration as Exhibit A, which includes the biographical information summarized above and a list of my patents, publications, and presentations.

APPLICABLE LEGAL STANDARDS

14. The section below sets forth certain legal standards that counsel for Moldex has provided to me, as I understand them.

Claim Construction

15. I understand that the language of the claims is construed as it would be understood by one of ordinary skill in the art at the time of the filing of the patent

application in the context of the patent. I understand that the starting point for claim construction is the language of the claims, but that the claims must be read in view of the other intrinsic evidence of record. The intrinsic evidence of record includes the language of the claims, the patent specification, the prosecution history, and any related patents and their intrinsic evidence of record. I further understand that the specification is always highly relevant to claim construction and is the single best guide to the meaning of terms.

16. I understand that words in a claim may be given a meaning other than their ordinary and accustomed one if it appears that the inventor used them differently. I understand the use of the phrase "the present invention" to refer to a specific improvement of a known system or to distinguish over the prior art of record can define and limit the scope of the invention. In addition, I understand that the specification may reveal a special definition of a claim term, or it may contain a disavowal of claim scope by the inventor. For example, the specification may distinguish over the prior art in a way that implicitly surrenders claim scope, or the prosecution history of the patents may limit the interpretation of the claim especially to exclude any claim interpretation given up on or disavowed by the inventor in order to obtain allowance.

17. I understand courts construe claims as a matter of law based on a review of the intrinsic record. I further understand that courts may rely on extrinsic evidence, such as inventor and expert testimony, dictionaries, and learned treatises, to provide background on the technology at issue, to explain how an invention works, or to explain the meaning of a term as it would be understood by one of skill in the art. I understand such evidence, however, cannot be used to contradict the intrinsic evidence of record.

18. I understand when reasonably possible, claims should be construed to preserve their validity. I understand this principle, however, does not allow courts to redraft the claims in a manner inconsistent with the intrinsic evidence to preserve their validity. I further understand that if the only claim construction that is consistent with the claim's language and the written description renders the claim invalid, then the claim is simply invalid.

Infringement Analysis Is A Two-Step Process

19. I understand that determination of whether an accused product infringes a patent claim is a two-step process. First, the language of the claim is construed as set forth above. After the claim has been properly construed, the claim is compared with the accused product to determine whether all of the features of the claim are present "literally" or by a substantial equivalent. The evaluation of literal infringement is a process of determining whether the accused product has each and every element specified in the properly construed claim. If even one element is not present, no literal infringement occurs. I also understand that the patent owner has the burden of proving literal infringement.

20. I understand that 3M asserted only claims of literal infringement with respect to the '693 patent in the underlying Patent Litigation.

Invalidity Analysis Is A Two-Step Process

21. I understand that determination of whether a patent claim is invalid is also a two-step process. First, the language of the claim is construed as set forth above. The second step compares the construed claims to the prior art to determine whether the

limitations of the claims are met by the prior art. A patent is invalid for lack of novelty if a single prior art reference expressly or inherently discloses each and every limitation of the claimed invention. A patent is invalid as obvious to a person of ordinary skill in the art if its limitations are disclosed in a combination of prior art references and there is either a motivation to combine the references or it would be obvious for such a person of ordinary skill to try such a combination.

'693 PATENT OVERVIEW AND CLAIM CONSTRUCTION

22. The '693 patent, entitled "Hearing Protector Against Loud Noise" and issued to Pascal Hamery on June 6, 2000, "relates to hearing protectors, and in particular…to a hearing protector to protect against high, continuous or impulse, noises." Like prior art hearing protectors, the hearing protector can function either in a selective attenuation mode or a maximum attenuation mode. Col. 1, Lin 13-15, 30-36. There are 17 claims recited at the end of the '693 Patent. Independent claim 1 and dependent claims 3 and 17 were asserted by 3M against Moldex in the underlying Patent Litigation.

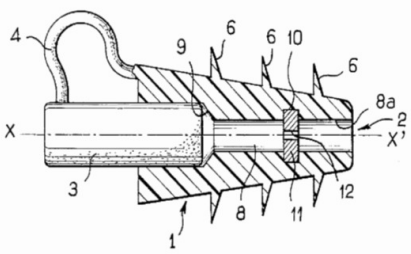
23. In describing the '693 patented invention, the '693 patent specification describes a problem with prior art earplugs that it solves and specifically distinguishes single-ended prior art earplugs that have this problem such as the one disclosed in French Patent Publication No. 2 676 642 ("FR'642"). Col. 1, Lin 30-47.

24. As described in the '693 specification: "The [FR'642 single-ended] protector comprises an elongate flexible body containing selective attenuation means, maximum attenuation means, and a manually controlled plug that makes it possible to choose the attenuation functional mode to be either selective or maximum." Col. 1, Lin 32-36.

25. The FR'642's "manually controlled plug" for changing attenuation levels is shown as item number 3 in annotated Figures 2 and 3 below from the French reference. The protector body (1) is pierced with a constricted channel that runs from an opening at the insertable end (2) of the earplug, designated x' in Figure 2, to an opening to the outside of the plug (7), designated x in Figure 2. Figures 2 and 3 disclose a first embodiment in two different attenuation modes:

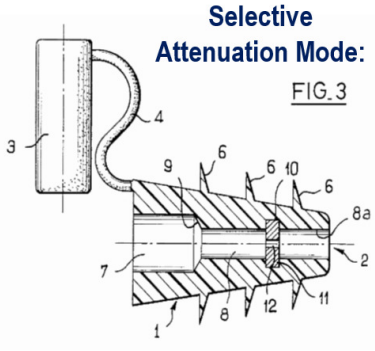
Maximum Attenuation Mode:

FIG. 2



Selective Attenuation Mode:

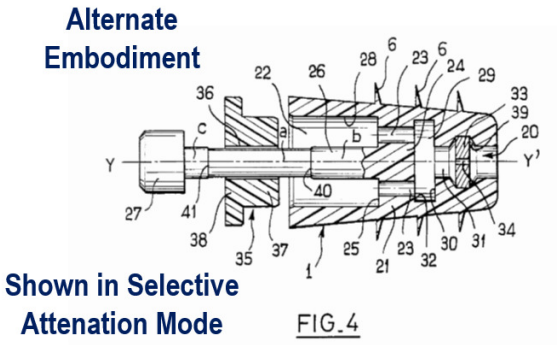
FIG. 3



26. In maximum attenuation mode (Figure 2), the plug 3 is inserted to block the channel opening at the non-inserted end of the earplug to stop all sound passage. In selective attenuation mode (Figure 3), the plug is removed so that sound can enter the channel. That channel, with its constrictions, is a "selective attenuation means" as described in the '693 patent specification.

27. FR'642 discloses an alternative embodiment in Figure 4, annotated and depicted below, where the plug element 35 has a different shape and connection to the rest of the device. The user of this Figure 4 embodiment of the FR'642 hearing protector can increase attenuation by adjusting the plug element to block the constricted channel. It is

accomplished by moving plug 35 over the rod 26 for greater or lesser attenuation of outside sounds. Col. 10, Lin 22-27.

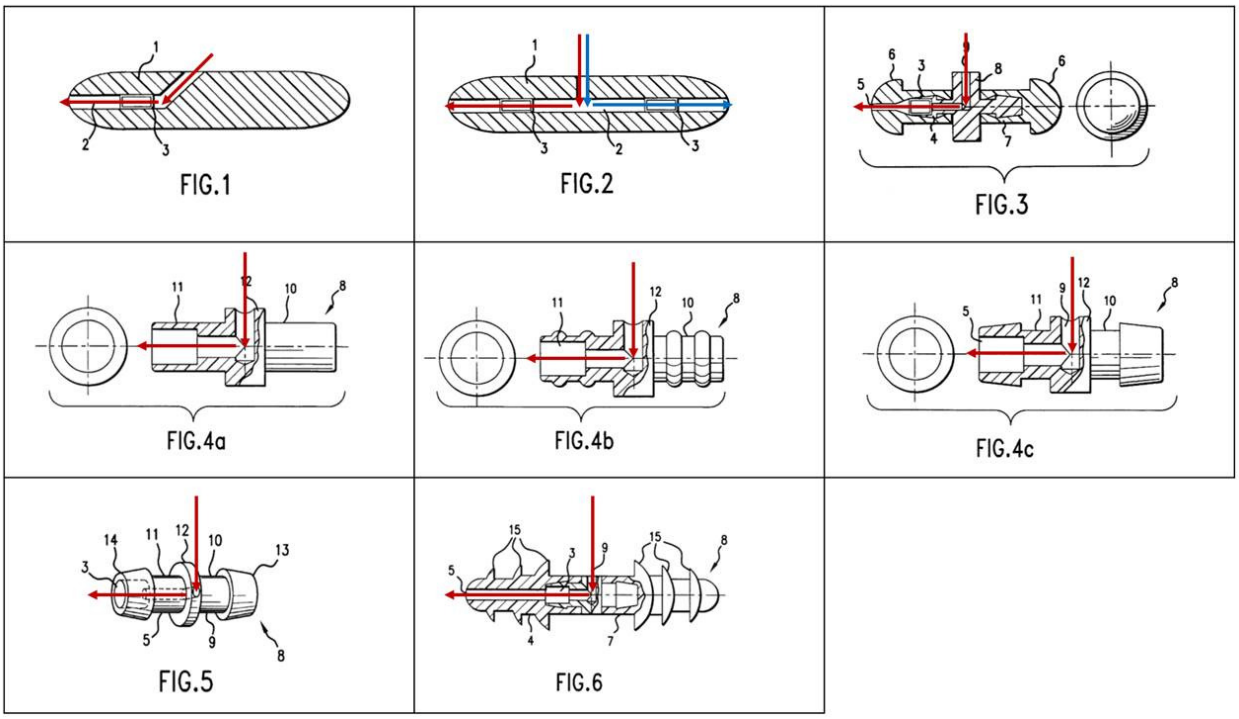


28. As described above, the '693 patent specification explicitly identifies a problem to be solved in single-ended earplug configurations like the FR'642 hearing protectors shown above: "[This FR'642 single-ended] device requires careful handling by the user who wants to block the auditory canal himself. This manipulation can be done incorrectly, resulting in inefficient blockage in the selective or maximum attenuation modes." Col. 1, Lin 37-41.

29. The '693 patented invention solves this problem by "provid[ing] a reliable hearing protector that does not suffer from the disadvantage of user adjustment and permits two configurations for noise attenuation that have different characteristics." Col. 1, Lin 44-47. The solution described in the '693 specification and claims is a dual-ended hearing protector. This dual-ended hearing protector invention avoids the problem with careful user adjustment by having "two ends, both of which can be inserted into the auditory canal and is referred to as a 'double-ended' device." Col. 1, Lin 57-59. This allows the user to change attenuation modes by "simply reversing the direction of the

hearing protector, or ear plug that is inserted into the auditory canal." Col. 1, Lin 57 - Col. 2, Lin 5.

30. Each of the Figures 1, 2, 3, 4a, 4b, 4c, 5, and 6 in the '693 patent show a dual-ended hearing protector (as illustrated in the annotated collage below) and these configurations are all described in the specification as having two insertable ends.



31. Figure 1 of the '693 patent specification (which is the same in terms of the relevant dual-ended feature as Figures 3, 4a, 4b, 4c, 5 and 6 for purposes of my analysis set forth below) shows one end that is completely solid and the other end that has a channel that allows some sound to pass into the ear through filter 3:

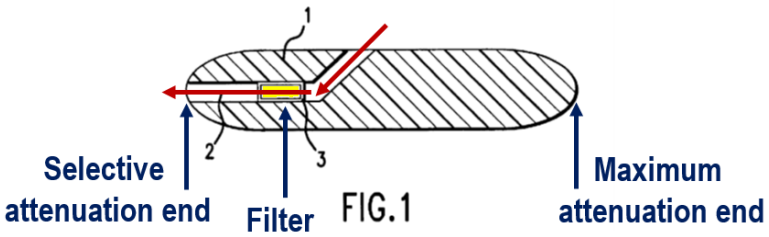
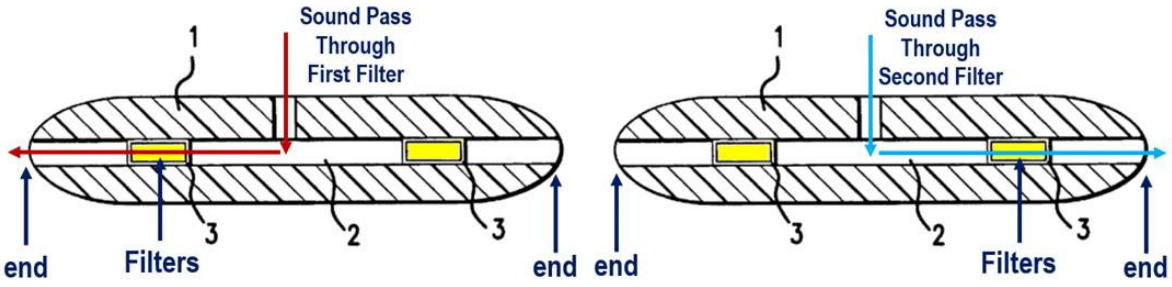


FIG.1

32. By inserting the end that is completely solid into the ear, the user can achieve maximum attenuation. The user can then change to selective attenuation mode by reversing the earplug and inserting the end with the channel to the outside of the earplug. There is no need for careful user adjustment; the user simply reverses the end of the hearing protector in the ear to achieve different sound attenuation levels.

33. Figure 2 sets forth a second dual-ended configuration. The specification states "FIG. 2 is a longitudinal section view of the hearing protector according to a second embodiment of the present invention. The hearing protector includes a body 1 pierced by a channel 2 that terminates at each end of the body 1, as well as the center of body 1. The channel 2 also contains an acoustic filter 3 at each end. The filters may or may not be identical." Col. 3, Lin 17-23. The Figure 2 dual-ended configuration, annotated and depicted below, shows that the user can change attenuation modes by simply changing which end is inserted into the ear:



34. The '693 patent was filed January 20, 1999, as a divisional application of U.S. Pat. No. 5,936,208 patent ("the '208 patent"). The application that gave rise to the '208 patent was filed December 18, 1997. The '693 and the '208 patents share the same patent specification and both claim priority from French Pat. App. No. 97.11623, which was

filed September 18, 1997. The '693 and '208 patents had the same examiner. There are no statements by the examiner or the patent applicant in the prosecution history of the '208 patent or the '693 patent that the claimed "invention" covers hearing protectors with only one insertable end.

Level of Ordinary Skill in the Art

35. In my opinion, a person of ordinary skill in the art in the field of the asserted '693 patent in the September 1997 timeframe would have had a bachelor's degree in acoustics, mechanical engineering, hearing and speech science, or their equivalent, and 2 or more years of relevant professional experience with acoustics and sound devices.

Construction of the '693 Patent Asserted Claims

36. 3M asserted claims 1, 3 and 17 of the '693 patent in the Patent Litigation, which are set forth in full below:

> 1. A hearing protector for selectively or automatically reducing noises having intensities up to 190 dB, the hearing protector being intended to be sealingly inserted into an auditory canal of a user, the hearing protector comprising:
>
> a cylindrical body having a center, a first end and a second end;
>
> a channel extending from said first and second ends to said center of said cylindrical body; and
>
> said channel containing a first acoustic filter and a second acoustic filter, each of said first and second filters being in communication with one of said first and second ends.
>
> 3. The hearing protector according to claim 1, wherein said first and second acoustic filters are not identical.
>
> 17. The hearing protector according to claim 1, wherein said acoustic filters permit non-linear filtration of sound

37. Claim 1 of the '693 patent (and its dependents) contains the relevant element -- "a cylindrical body having a center, **a first end and a second end**" -- that is the focus of Moldex's motion for a determination that no reasonable attorney or litigant could expect to succeed in accusing Moldex's BattlePlug earplug of infringing the '693 patent. In order to succeed in the Patent Litigation, 3M would have had to construe this element of the '693 patent to cover a hearing protector that has only one insertable end. In my opinion, it is not reasonable, reading the claims in the context of the intrinsic record, to construe the '693 patent claims to cover hearing protectors with only one insertable end.

38. The '693 patent claims, when read in the context of the intrinsic record, clearly demonstrate that the terms "first end" and "second end" require the claimed hearing protector to have two ends, each of which is insertable into the auditory canal.

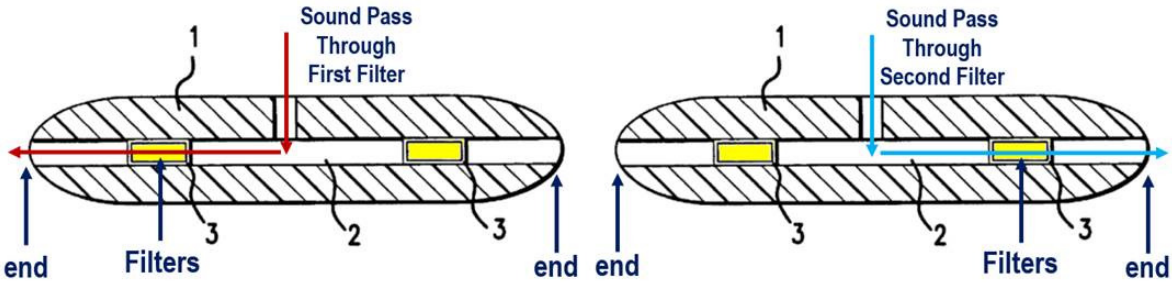
39. The '693 patent specification repeatedly states that the invention is a dual-ended hearing protector, with two ends that are insertable into the ear, and explicitly distinguishes over single-ended hearing protectors, i.e., with only one insertable end:

> **The hearing protector has two ends**, **both of which can be inserted into the auditory canal and is referred to as a "double-ended" device**. **This contrasts with the well-known hearing protector that typically has one end that can be inserted into the auditory canal**, while the other end allows the hearing protector to be gripped so the user can position it in the auditory canal. **The present invention has two ends**, that may or may not be identical, **either of which can be inserted into the auditory canal**, thus making it possible to choose between two operating modes of attenuation that may or may not be identical.
>
> **The device is useful in the fact that it possesses**, in the same hearing protector, **two configurations** that can have different attenuation characteristics, **both obtained by simply reversing the direction of the hearing protector, or ear plug, that is inserted into the auditory canal**.

Col. 1, Lin 57 - Col. 2, Lin 5. Emphasis added.

40. This language is not limited to particular embodiments. It is clear that it applies to the invention as a whole, including every possible embodiment. The specification is entirely consistent—each and every depiction and description of the invention shows a double-ended hearing protector—never a single-ended hearing protector. For example, all configurations of the invention (shown and discussed above), which were identified by the patent office during prosecution, shows the invention is directed to dual-ended hearing protectors, not single-ended.

41. The specification describes these configurations as dual-ended protectors. Col. 2, Lin 48-67. For example, Figure 2 is described and depicted in the specification as a "double-ended" hearing protector:



42. As described and shown in the annotated figures above, the user changes attenuation modes by changing which end is inserted. It is this double-ended construction and reversibility that does not require careful user manipulation of the plug to block sound which distinguishes the invention over the careful manipulation required to obtain levels of sound attenuation provided by the prior art FR'642 reference cited in the specification.

43. In fact, the claims, read in the context of the '693 patent specification, distinguish such devices that require the user to block the channel to increase sound attenuation:

> [This FR'642 single-ended] device requires careful handling by the user who wants to block the auditory canal himself. This manipulation can be done incorrectly, resulting in inefficient blockage in the selective or maximum attenuation modes ... . The goal of the present ['693 patent] invention is to provide a reliable hearing protector that does not suffer from the disadvantage of user adjustment and permits **two configurations** for noise attenuation that have different characteristics.

Col. 1, Lin 37-47. Emphasis added. "The [patented] device is useful in the fact that it possesses, in the same hearing protector, two configurations that can have different attenuation characteristics, both obtained by simply reversing the direction of the hearing protector, or ear plug, that is inserted into the auditory canal." Col. 2, Lin. 1-5.

44. There are no statements by the examiner or the patent applicant in the prosecution history of the '208 patent or the '693 patent that the claimed "invention" covers hearing protectors with only one insertable end.

45. As such, it is not a reasonable reading of the '693 patent to conclude that the "first end" and "second end" in the claims refers to a single-ended hearing protector with only one insertable end. Rather, it is my opinion that the claim, read in the context of the intrinsic record, must be construed to require a hearing protector with two insertable ends.

INFRINGEMENT ANALYSIS OF MOLDEX'S ACCUSED PRODUCTS

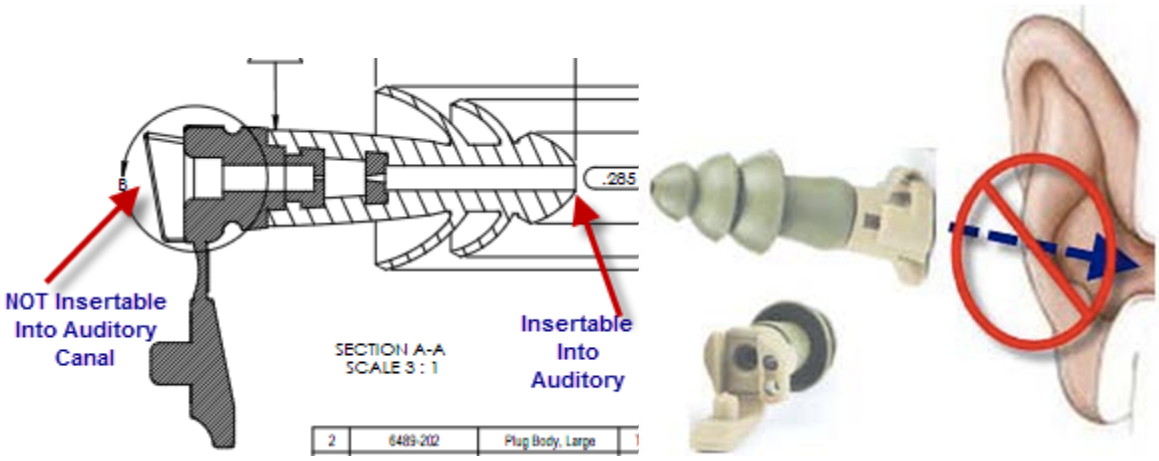
46. 3M accused Moldex's BattlePlug hearing protector products ("Accused Products") of infringing the asserted claims of the '693 patent.

47. Although Moldex's Accused Products come in different sizes, colors and packaging, they are all identical with respect to the structural feature relevant to my analysis of whether any reasonable attorney or litigant would succeed in accusing them of infringement when the '693 patent claims are properly construed. Representative images of a set of the Accused Products are depicted below:

48. Asserted claim 1 (and dependent claims 3 and 17) of the '693 patent requires "a cylindrical body having a center, **a first end and a second end**."

49. As explained above, the '693 patent claims, properly construed, are directed to only one type of invention, a dual-ended hearing protector with each end insertable into the auditory canal. Moldex's Accused Products do not meet this requirement—the hearing protectors are single-ended earplugs, and only one of the ends can be inserted into the ear. As such, the Accused Products cannot and do not infringe any claim of the '693 patent.

50. Images and schematics of the Accused Products (and the physical exemplars I have examined) clearly show that only one end is insertable into the auditory canal, as shown below:



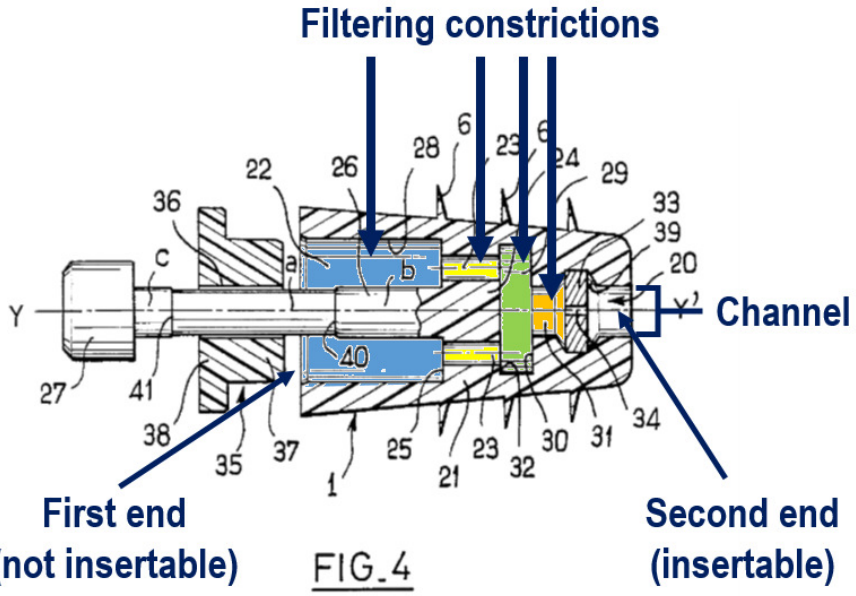
51. In contrast to the claimed invention of the '693 patent, one end of the Accused Products is a "plug handle" that cannot enter the auditory canal. This is similar to the "well known" prior art single-ended earplugs that the '693 patent distinguishes over in the specification. The Accused Products also change attenuation mode through user adjustment of the cap at the non-insertable end—as in prior art such as the FR'642 reference—not by changing which end is inserted into the ear canal. The '693 patent distinguishes hearing protectors, like FR '642, with only a single insertable end as "well known" prior art.

52. For these reasons, there is no infringement and no reasonable person in 3M's position could have expected to prevail on the merits in asserting a claim of infringement of the '693 patent against Moldex's Accused Products.

INVALIDITY ANALYSIS

53. Although my analysis above is directed only to the issue of whether the '693 patent claims cover single-ended earplugs, the complete set of claim constructions 3M would have had to advance in the Patent Litigation for the '693 patent to cover Moldex's Accused Products would clearly render the patent invalid in view of the prior art.

54. For example, if 3M's improper constructions were adopted in an attempt to cover Moldex's Accused Products, i.e., a single-ended hearing protector with a single channel running end to end and multiple constrictions, then the '693 patent would also read directly on the FR'642 patent, which the '693 patent distinguished over in the specification. As shown below, the FR'642 patent discloses a hearing protector with one insertable end (and a non-insertable second end) and a single channel running end to end and multiple constrictions for filtering sound:



55. As set forth in FR '642, Figure 4 represents a "flexible body 1" that "is axially transversed by a channel 20 composed of a succession of cylindrical sections of different cross-section which ensures a non-linear acoustic transmission." Col. 8, Lin 14-16. "The succession of channel sections 22, 23, 29 and 31…ensures…a non-linear acoustic transmission that results in a selective attenuation of sounds[.]" Col. 9, Lin 11-18.

Applying 3M's constructions, Figure 4 thus discloses a single-ended earplug, with a single channel, and multiple filters—*i.e.*, constrictions—within that single channel.

56. Thus, if the BattlePlug meets the limitations of the '693 patent, the FR '642 reference necessarily invalidates asserted claim 1. Asserted claim 3 requires that the first and second acoustic filters are not identical, and asserted claim 17 requires that the acoustic filters permit non-linear filtration of sound. These features were also well-known in the FR '642 prior art and would invalidate the dependent claims. Figure 4 in FR '642 has a "succession of cylindrical sections *of different cross section* which *ensures a non-linear acoustic transmission*." Col. 8, Lin. 14-16 (emphasis added).

57. The key similarities between the prior art FR'642 reference and the Accused Products are unmistakable. If the '693 patent claims were construed as 3M would have to do to cover Moldex's Accused Products, i.e., a single-ended hearing protector with a single channel, multiple constrictions and openings at both ends, then the Accused Products merely practice the FR'642 prior art and the '693 patent is necessarily invalid over the FR'642 prior art.

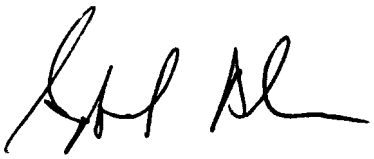
CONCLUSION

58. Based on the foregoing, in my opinion, no reasonable person in 3M's position could have had any reasonable expectation that it would succeed in establishing that Moldex's Accused Products infringe the '693 patent. The Accused Products do not have two insertable ends as required by each of the asserted claims, among other things, and the only way to read the claims on Moldex's Accused Products would render the '693

patent invalid. The need for 3M to rely on this improper claim interpretation demonstrates that 3M's claims were objectively unreasonable and baseless.

I declare, under penalty of perjury under the laws of the United States of America, that the foregoing is true and correct.

Executed this 1st day of April 2016 in Halfmoon Bay, BC Canada.



Sigfrid D. Soli, Ph.D.